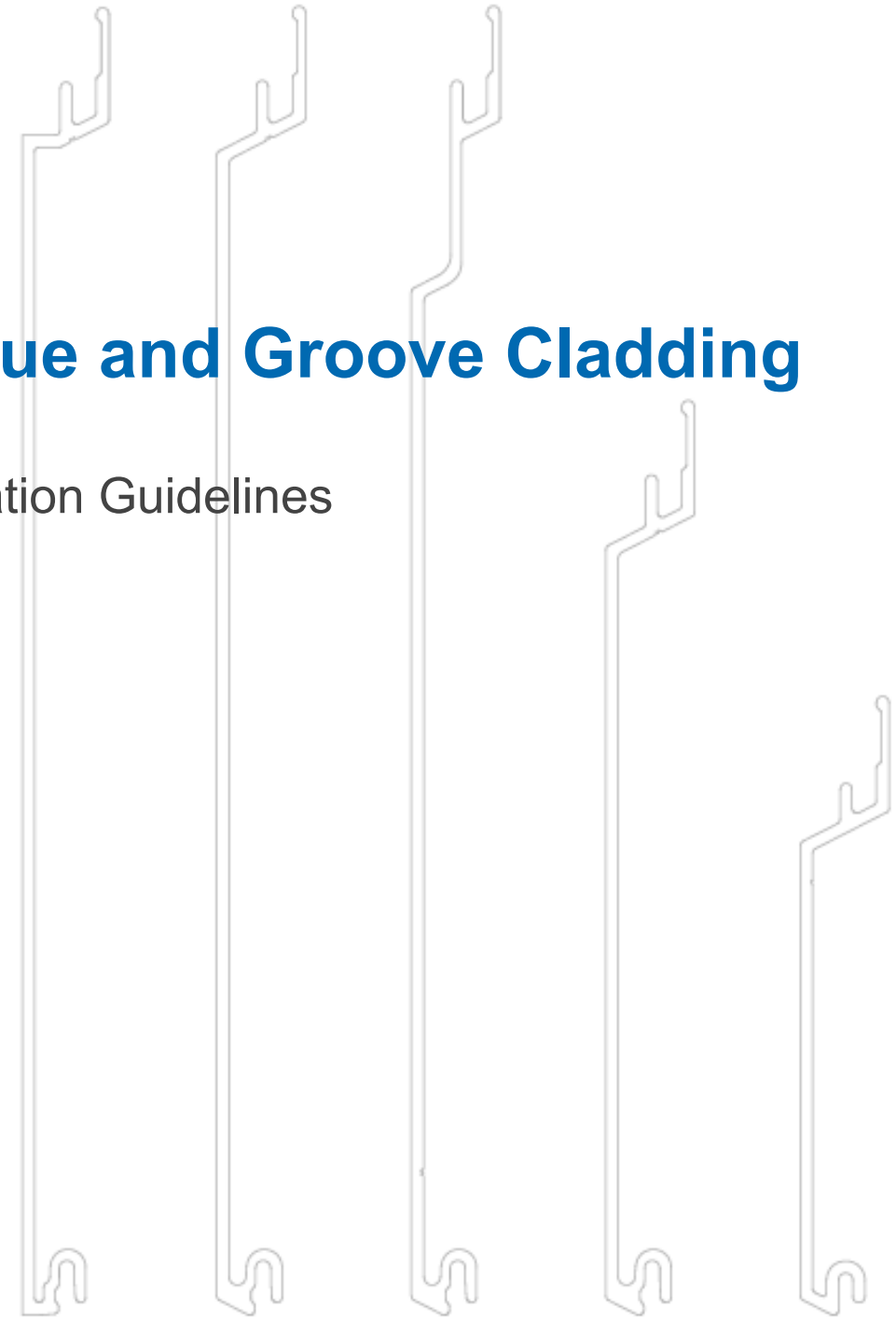
LONGBOARD®
ARCHITECTURAL PRODUCTS



Tongue and Groove Cladding

Installation Guidelines

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Product Description

Longboard® architectural products are extruded aluminum systems for high performance building facades and decorative elements. These streamlined systems are integrated with existing building materials and designed for many applications. Longboard encompasses a naturally beautiful finish while providing a premium quality material designed to be installed horizontally or vertically. Longboard products are available in standard lengths and widths for typical styles of cladding and specific architectural products.

Material Specifications

Surface Finishes
Longboard Products are available in a wide range of woodgrains and solid colors varying in color and tone to suit your aesthetic look. Custom solid colors are available upon request.

Longboard woodgrains have a repeat pattern, shipped in sets mated back-to-back in each box. Install these as they come out of the box, as an A&B pattern staggering each plank approx. 1-2' (305-610mm) from the previous plank to achieve a random pattern aesthetic.
All Longboard Products are produced 1" (25mm) oversized, as one end is drilled for the coating process and both ends have 1/2" (12mm) of masking tape (woodgrains only) which must be cut off for best results.

Expansion & Contraction
Planks & components expand & contract 1/4" (6mm) over 24' (7.3m) in all directions, measured over a 30°C (54°F) temperature range. Due to this range of movement, the following expansion components should be installed parallel and perpendicular every:

Horizontal Install

- 24' (7.3m) max[1] [2] Perpendicular to Planks: Traditional Flat Reveal Set, Traditional U-Reveal Set
  Parallel to Planks (at each floor elevation): Compression Joint

Vertical Install

- 24' (7.3m) max[2] Parallel and/or Perpendicular to Planks: Traditional Flat Reveal Set, Traditional U-Reveal Set, J-Tracks back to back

[1]Note: 40' (12.2m) max if using staggered butt-joints.
[2]Note: Through-wall flashing (where required) at every floor elevation.

Other options (Perpendicular to Planks only)

- 12' (3.7m) -Craftsman U-Reveal Set
- 6' 8" (2m) -Precision Flat Reveal

When using expansion components, each plank must terminate into a minimum of one (1) component to allow for expansion & contraction.
See: Appendix for tables of expansion/contraction calculations per foot/meter of material.

Material Ordering & Delivery

● Packaging:	Planks are sold in box quantities: 6” V-Groove, 6” Channel & 6” Smooth: 96 SQ FT/Box (8/24’s) w. 90pcs Quick-Screen Clips included 4” V-Groove: 96 SQ FT/Box (12/24’s) w. 135 Quick-Screen Clips included Components are sold individually by the 12’ (3.7m) length.
● Shipping:	Lead time is 3-6 business days* + shipping *(*subject to change)*, delivered on 24’ (7.3m) long skids weighing up to 2000 lbs. A mechanical lift with forks is required on site to receive the order.
● QC:	Always inspect the delivery for damage and contact LB ASAP if there are any issues: info@longboardproducts.com or 1-800-604-0343 and include your PO# and any pictures if possible. Mark the delivery receipt as “damaged” and accept the delivery as-is. Longboard is not responsible for the installation of blemished or damaged material.

Storage & Handling

Be sure to store the material flat, keep it dry, safe & secure and remain in unopened cartons until ready to be installed.

See Appendix for proper handling and care instructions.

Cleaning Recommendations

While Longboard finishes require zero maintenance, we do recommend periodic cleaning to keep the product looking its best. Our finish is tested to withstand corrosion, fading and normal wear, however, neglect and rough conditions could have negative effects on the surface finish. Your Longboard products should be cleaned immediately after installation. See the cleaning guide for our suggestions based on soil level. Basic methods use a combination of moderate water pressure, soft sponge/brush and a mild detergent.

see Cleaning Guide for full requirements: longboardproducts.com

⚠️NEVER use aggressive acid or alkaline cleaners on Longboard finishes. Do not use cleaners containing Trisodium Phosphate, Phosphoric Acid, Hydrochloric Acid, Hydrofluoric Acid, Fluorides or any other compound that is known to react with metal.

Always follow the product instructions for dilution. Cleaning the surface with a cleanser that is not diluted may result in damage to the coating.

Warranty

Upon substantial completion of the project, register for warranty online here: longboardproducts.com/warranty

⚠️Registration is required for the warranty to be in effect.

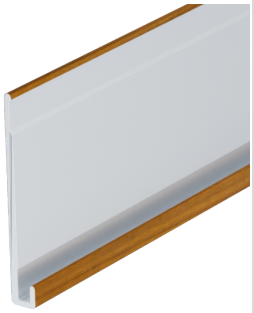
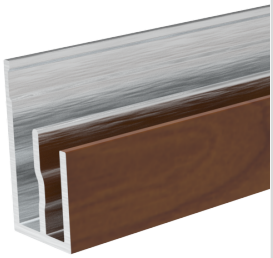
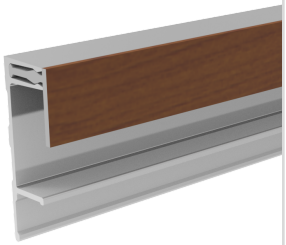
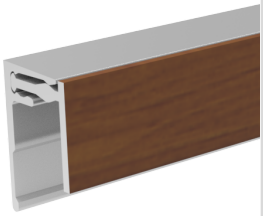
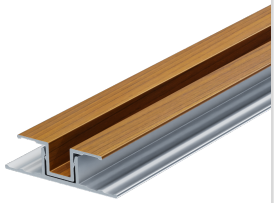
Components/Tools

Tools/equipment/hardware

Use standard wood-cutting tools such as a Table Saw & Miter Saw with a carbide blade (60-80 tooth) for non-ferrous metals (aluminum), Jig Saw, Hole-Saw & drill for attachments.
Recommended to use standard 2” - #8 panhead screws supplied by the installer.

Component images and descriptions (Typical)

Longboard systems consist of many components used in conjunction with each other to create a dynamic seamless look. For all LB components go to longboardproducts.com.

 Stater Strip	 Starter J-Track	 Two Piece Corner Set	 Termination Set
 J-Track	 Two Piece J-Track	 Flat Reveal Set	 U-Reveal Set
 6” V-Groove Plank	 6” Channel Plank	 6” Smooth Plank	 4” V-Groove Plank

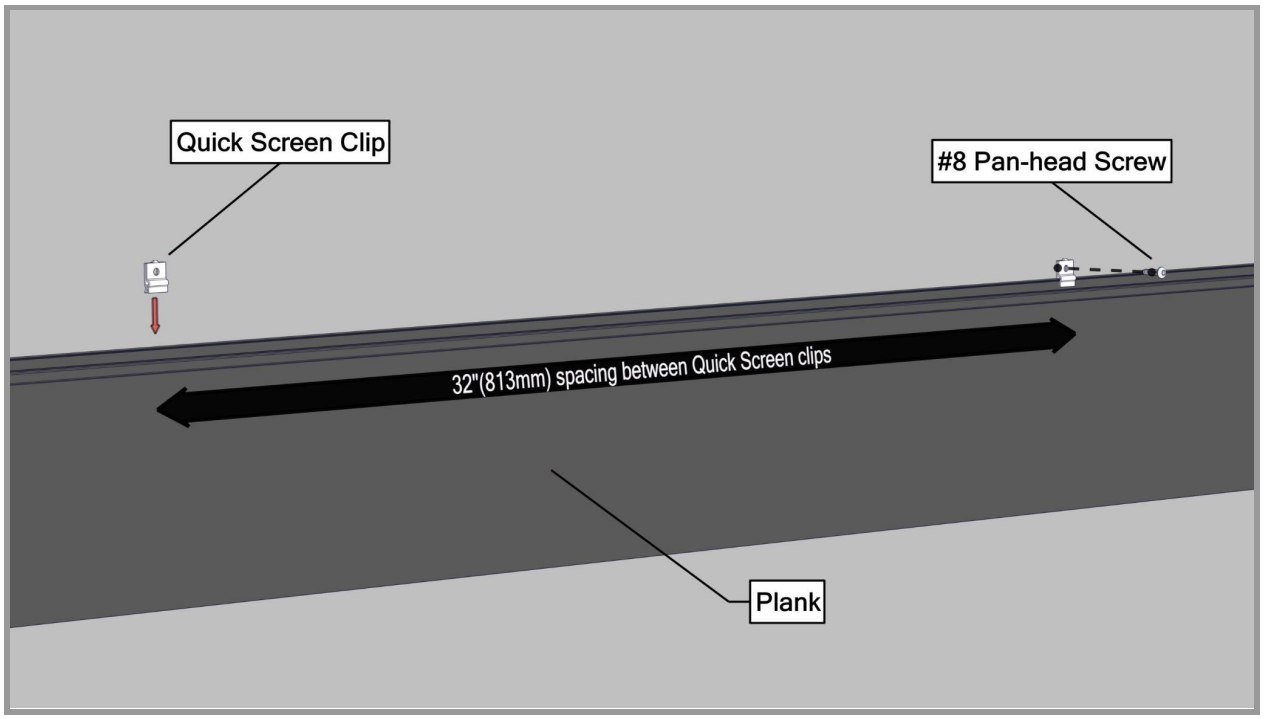
System Install

Installation considerations

- Longboard system typical dimensions:
  Planks and components total depth - 9/16” (15mm)
  Planks - 1/2” (12mm)
  Curved walls: - 15’ (4.6m) min radius
  (tighter radii contact Longboard)
- Longboard Products are not recommended for use on marine applications in direct contact with salt water.
- Longboard Cladding is to be installed outboard of a weather resistant barrier, including all flashings, following code and building requirements.

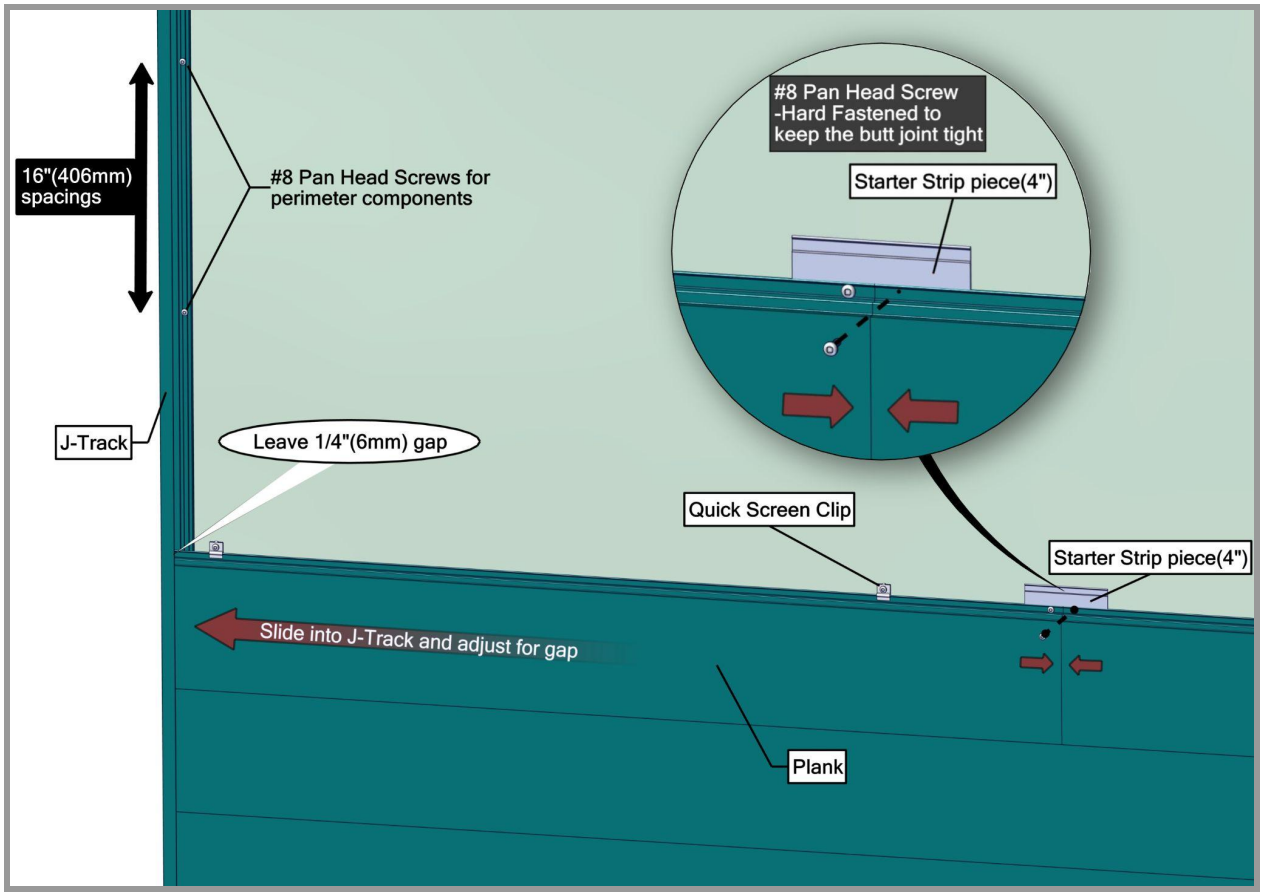
Install techniques/tips/details

- It is good practice to leave a 1/4” (6mm) gap between every 2nd perimeter component joint or 24’ (7.3m) to allow for expansion & contraction. Consider the joints where components meet each other to dictate which component is installed first (eg: right angle butt joints, mitered joints etc.).
- Quick-Screen Clips allow for free movement of the planks, to expand & contract during thermal changes.

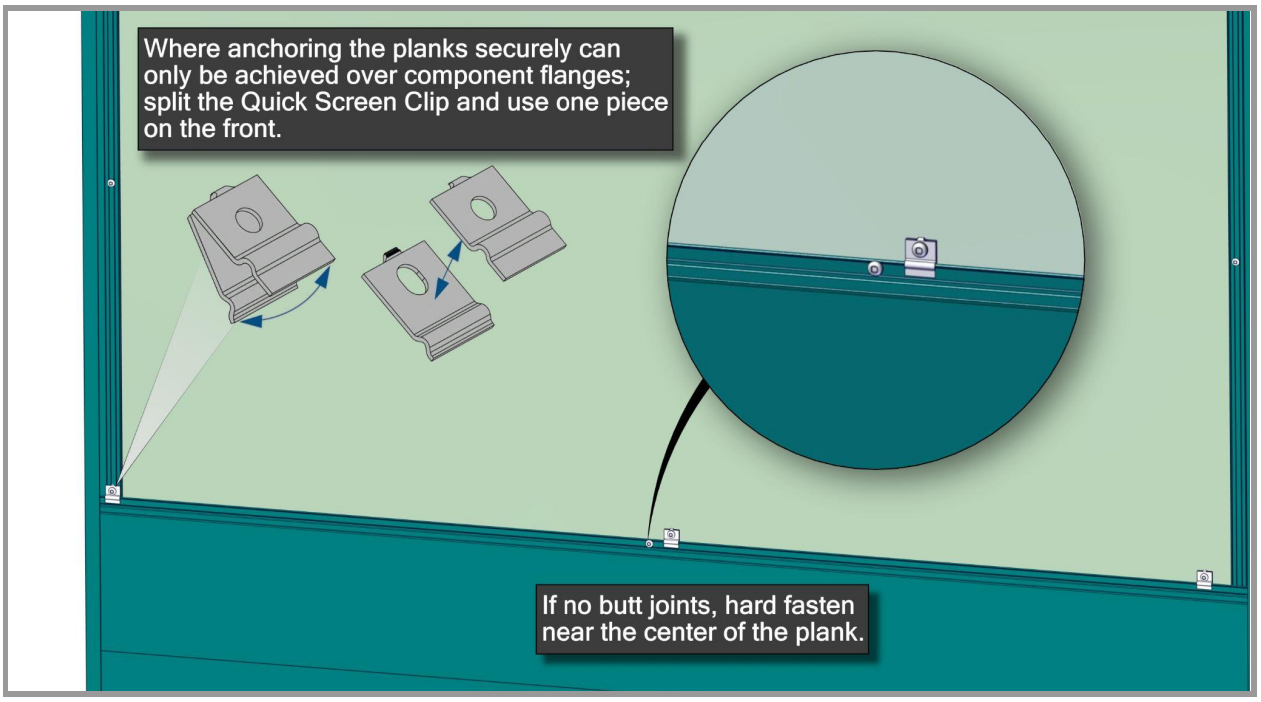


- ⚠️BUTT-JOINTS. When installing staggered butt-joints, hard-fasten the two planks at the butt-joint to ensure joints do not open up (**See Detail A, B & C)**. Fasteners should be anchored into a solid secure framing member, blocking, furring strip or backer plate, etc.
- If needed, use touch-up paint pens (purchased separately) to finish the ends of the two (2) planks at the butt-joint.
- DO NOT install more than one (1) butt-joint between two components
- DO NOT hard-fasten a plank to a component trim (except Precision outside corner), as this will restrict its ability to expand & contract into the component.
- If no butt joints along the length, it is good practice to hard-fasten each plank directly through the flange near the center, to keep the planks from migrating.
- *When using the Precision Outside Corner, miter the end of the Planks to fit tight to the Corner. Secure by hard fastening at the mitered end into the flange of the Corner to ensure joints do not open up.
- Butt-joints are not permitted when using the Precision Components, and components should be installed every 6’ 8” (2m) max.
- DO NOT hard-fasten more than one (1) location per plank.
- Fasten only:

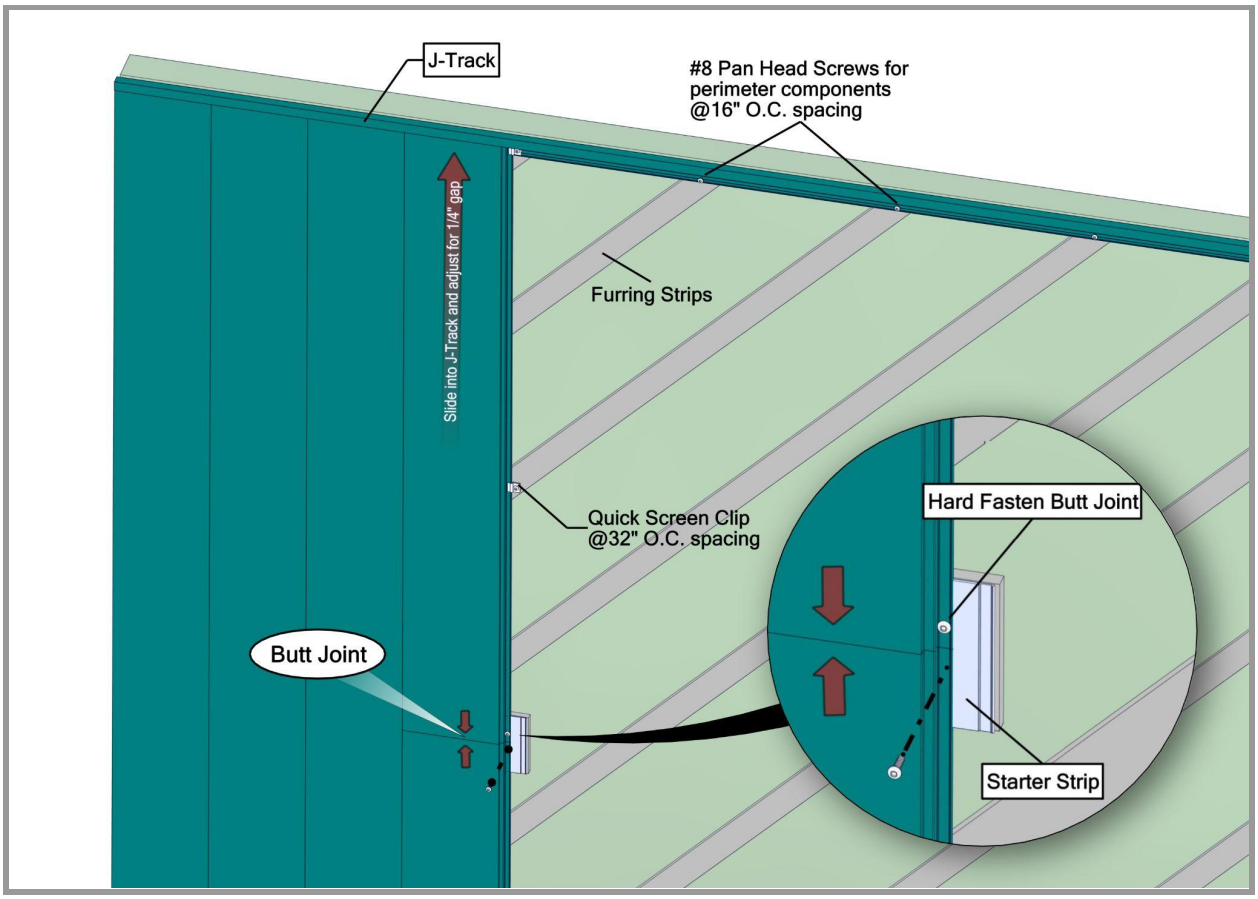
Situation	Location
No butt-joints:	-Center of planks
Butt-joints:	-At the joints
*Precision Outside Corner w/no butt joints:	-At the Corner



Detail A



Detail B

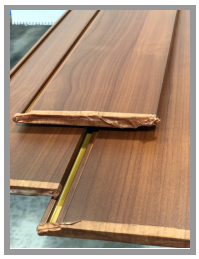


Detail C

Cutting

⚠Always be sure to wear appropriate PPE: eye & hearing protection.
Cut planks using specified Miter Saw to terminate to accurately measured distances between components and subsequent planks allowing for expansion & contraction. Trim the taped/drilled ends of all stock length material by at least **1/2“ (12mm) each end** and discard.





Fastening

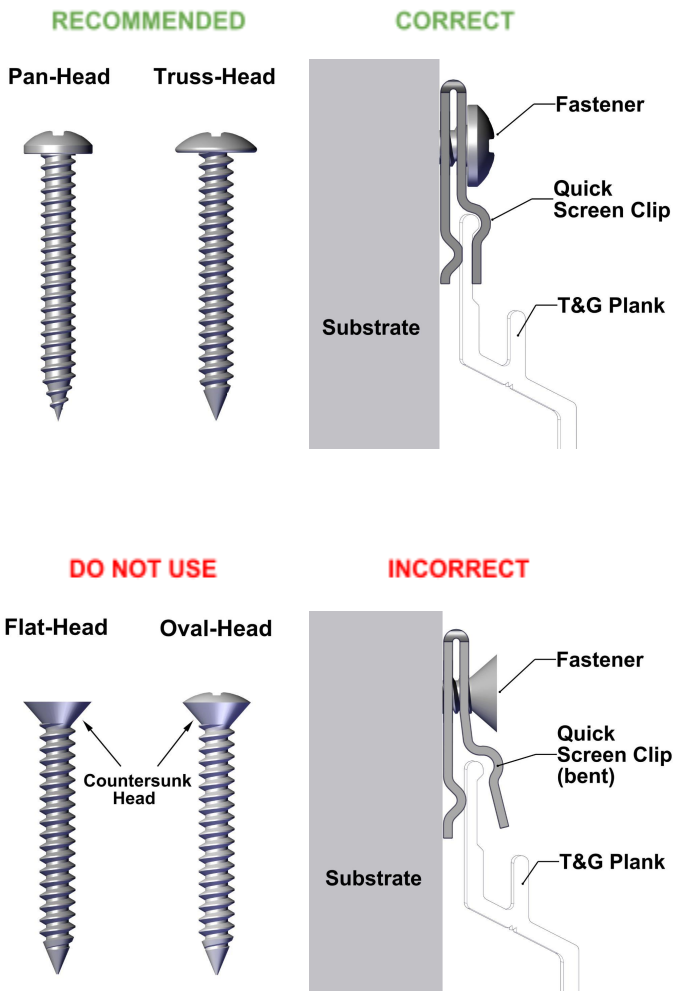
Fasteners must be corrosion resistant and comply with all local building codes.
⚠All fasteners should be suitable for exterior use and be compatible with the substrate type.
Fasteners should be anchored into a solid secure framing member, blocking or furring strip. For vertical applications when the framing member is not available, install diagonal furring strips to securely fasten planks.

Perimeter components should be hard-fastened every **16” (406mm) O.C.** directly through the flange using #8 pan-head screws(supplied by others). These components should be fastened within **8” (203mm)** of the end for secure fastening.

Planks & starter components are secured using Longboard **Quick-Screen Clips** fastened to the substrate every **32” (813mm) O.C.** using #8 pan-head screws(supplied by others). The Quick-Screen Clips are included in the order for 32” (813mm) spacings.

See **Appendix for project specific fastener spacing:**
Quick Screen Clip - Wind Load Tables 3 & 4

Fastener types



Framing requirements

Always consult the local building authority and follow local building code requirements.
The Longboard T&G Cladding system typically weighs approx. 1.5lbs/sq.ft.

Wood Framing

- Size: 2x4 minimum
- Spacing: 16” (406mm) O.C. (see Appendix Table 3 & 4 for reference)
- Sheathing: Exterior grade minimum 7/16” (11mm) plywood/OSB or equivalent exterior wall sheathing.

Metal Framing

- Gauge: 20 ga. minimum (see Appendix Table 3 & 4 for reference)
- Spacing: 16” (406mm) O.C. (see Appendix Table 3 & 4 for reference)
- Sheathing: Exterior grade minimum 7/16” (11mm) plywood/OSB or equivalent exterior wall sheathing.

Concrete/CMU

Wood or metal furring is required over concrete and CMU.

Wood Furring:

- Size: 2x2 minimum
- Type: Pressure treated lumber
- Spacing: 16” (406mm) O.C. oriented vertically

(see Appendix Table 3 & 4 for reference)

Metal Furring:

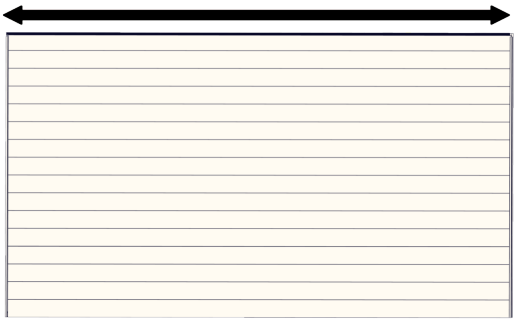
- Size: 20 ga. minimum (see Appendix Table 3 & 4 for reference)
- Type: Hat channel, c-stud, or z-furring.
- Spacing: 16” (406mm) O.C. oriented vertically (see Appendix Table 3 & 4 for reference)

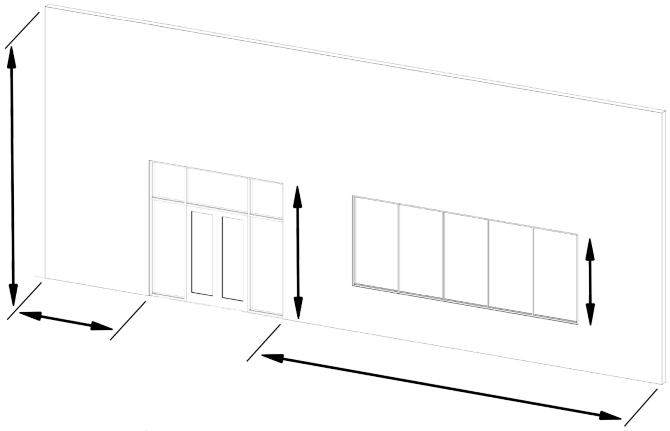
System layout

Perimeter and field area limitations

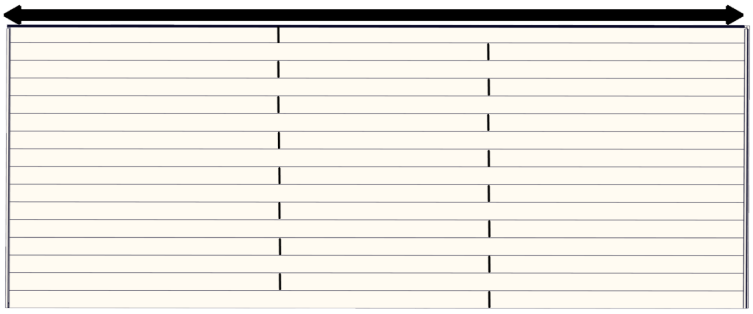
Measure and layout your wall area to consider plank & component alignment with fixtures, penetrations and adjacent walls, for desired appearance (Traditional Components used for illustrative purposes). The same methodology applies for vertical installations.

Seamless runs up to 24’ length planks (no butt-joints)

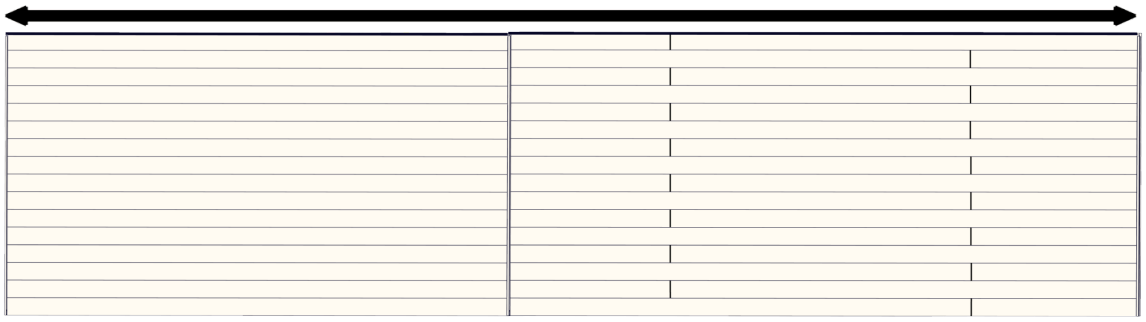




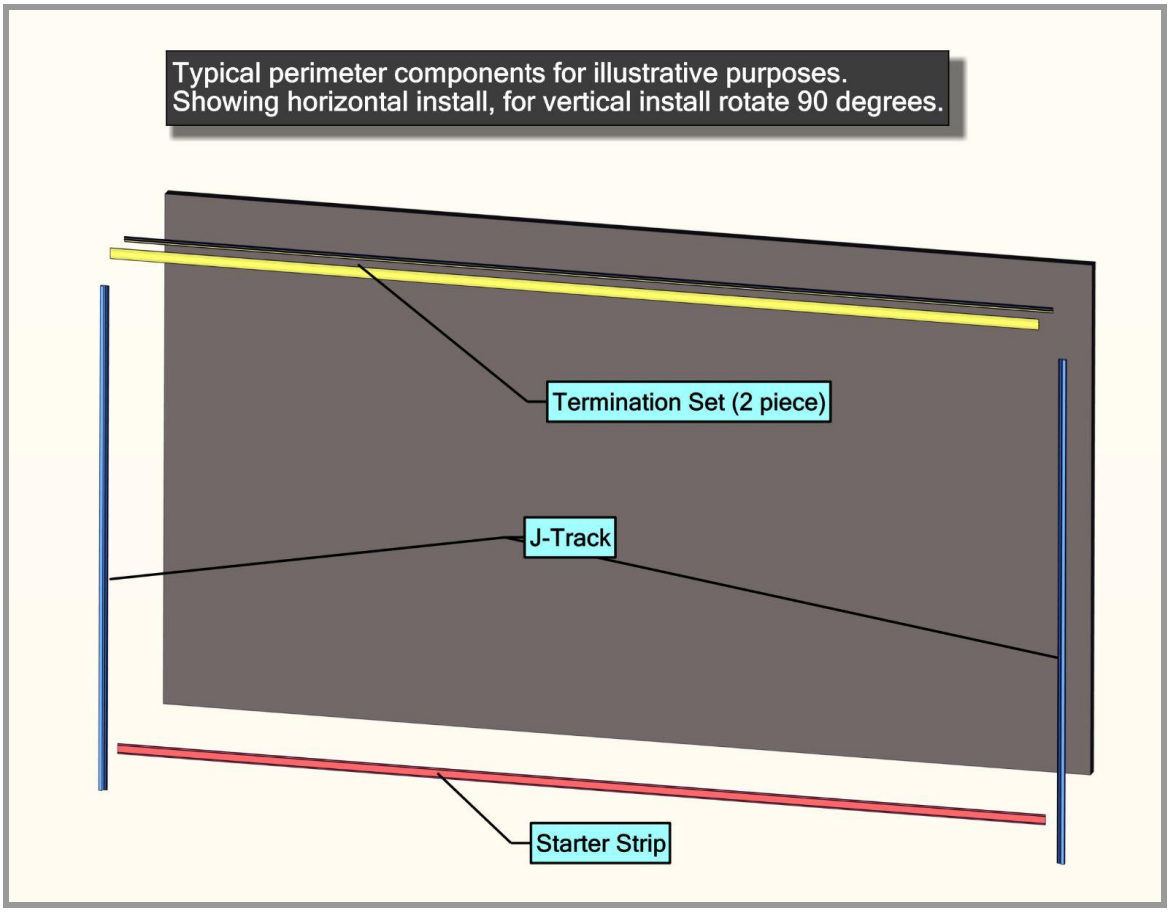
Runs up to 40’ length with staggered butt-joints



Runs greater than 40’ length, use a Reveal set to divide field areas.



Install perimeter components



J-Track/Two Piece J-Track

Type:	J-Track or Two Piece J-Track
Location:	Perpendicular to Planks (eg: sides of windows and doors), along gable end walls, other angled conditions, window/door headers and other penetrations.
Details:	Notch the flange at the ends where they meet corner components.

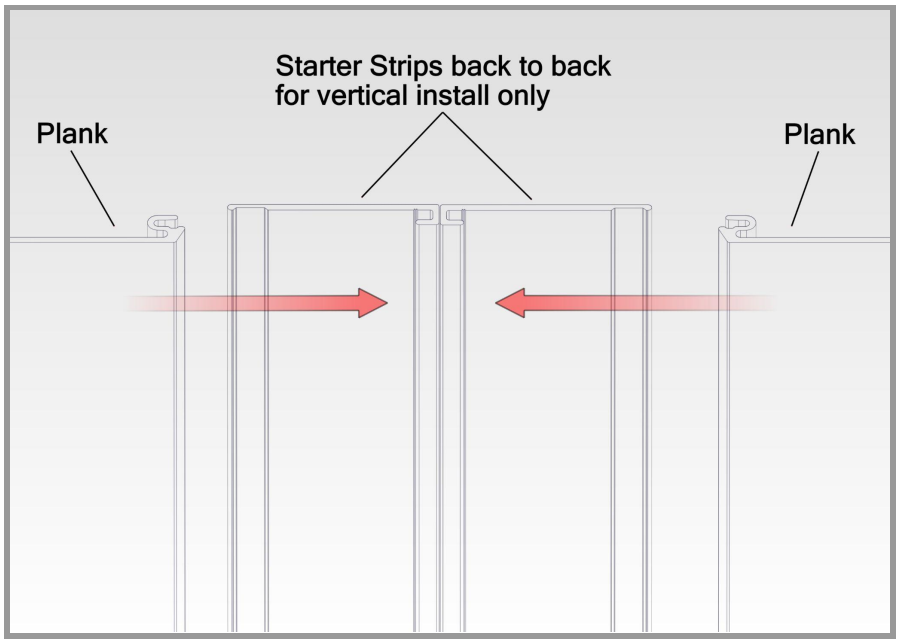
Termination Set

Type:	Termination Set
Location:	Parallel to Planks along top of wall, underside of windows (horizontal cladding only), sides of windows/doors (vertical cladding only) and other penetrations.
Details:	Install base only to start and end cap once planks are installed.

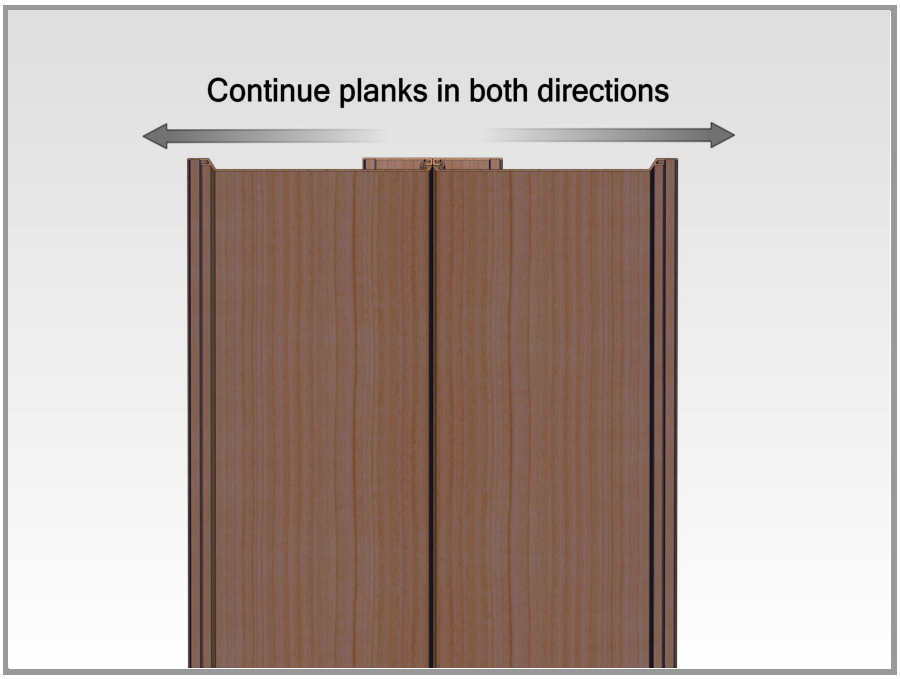
Starter/Starter J-Track

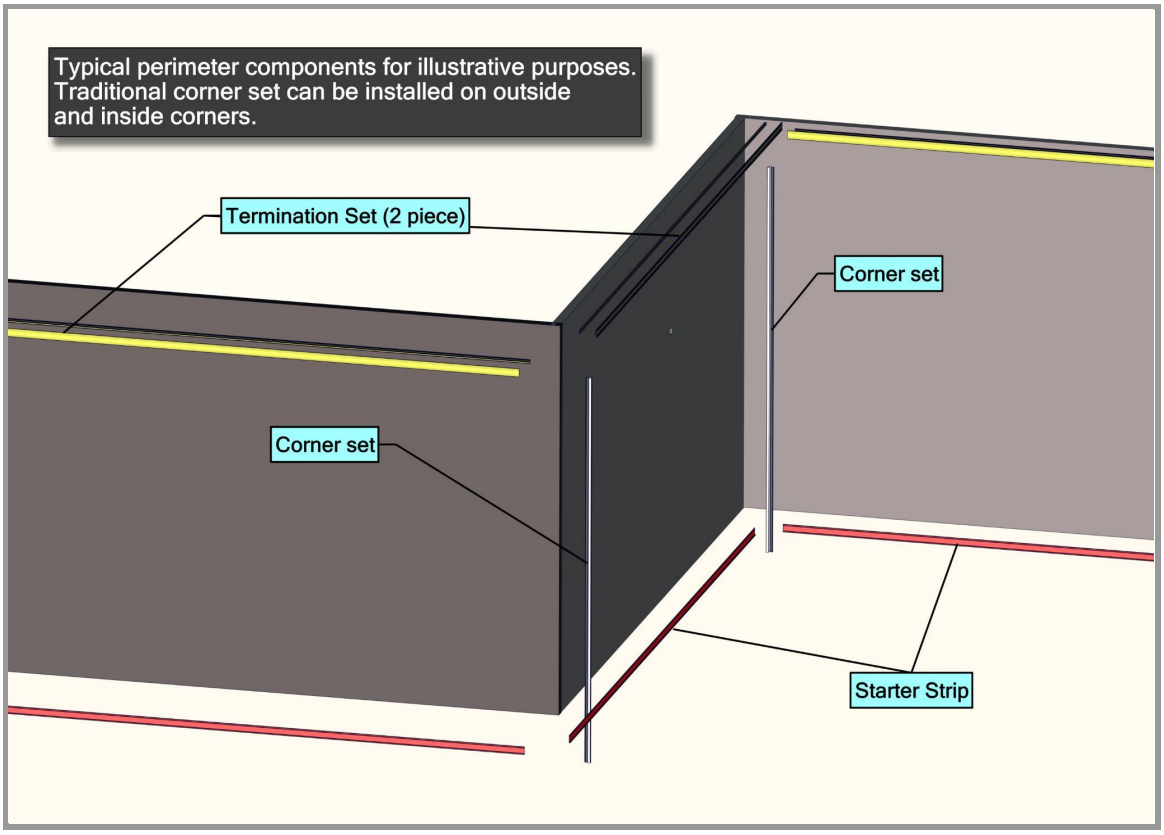
Type:	Starter or Starter J-Track
Location:	Typically along the bottom of the wall(s) for horizontal installs or starting at one side for vertical installs (two starter strips can go back to back in the center of an area to even out planks).
Details:	Can go back to back for vertical installs at the center of each cladding area for equal width ends.

For vertical installs only, install Starter strips back to back then connect the first plank on both sides.



Install vertical back to back Starter strips in the center of wall areas for even layout and symmetry. Continue the planks to the termination end of the install.



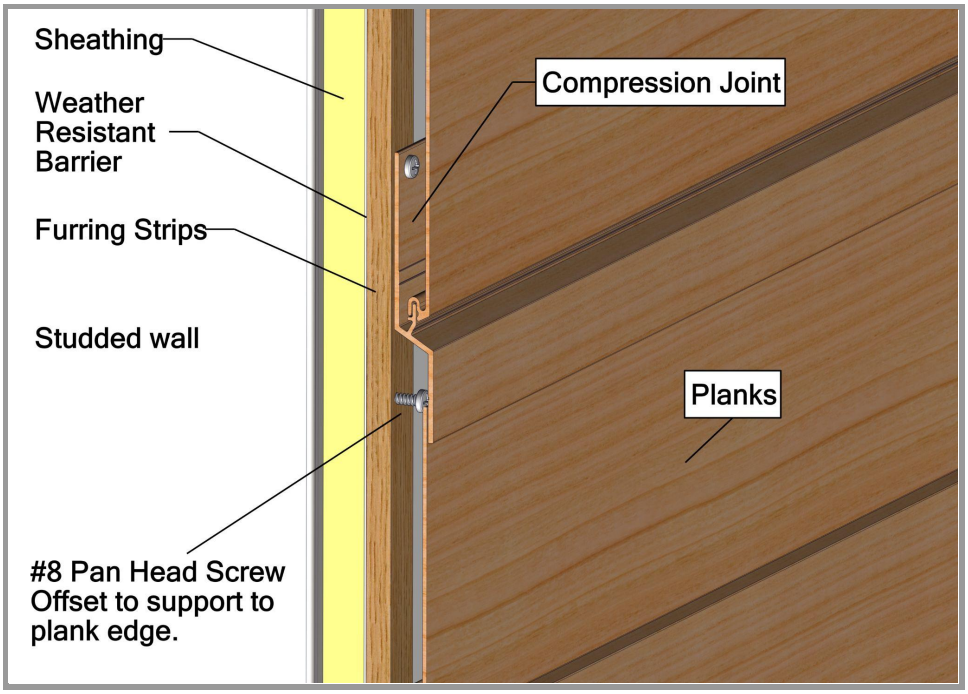


Corners

Type:	The Traditional Corner Set (2 piece system).
Location:	Inside & outside corners of the area of application.
Details:	Typical corner set, also recommended for vertical cladding installs.

Install field components -Floor elevation

Compression Joint



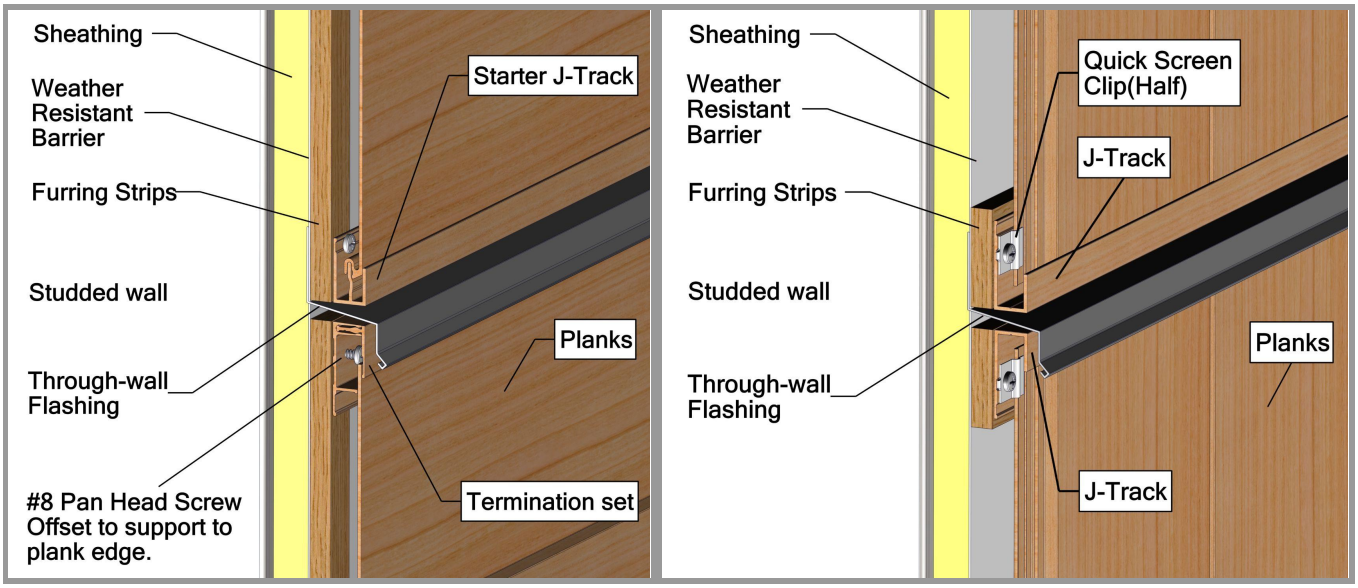
Floor elevation

Type: Compression Joint, Termination set/Starter J-Track, J-Track back to back.

Location: Typically at every floor elevation and where through-wall flashing is required.

Details: Note the orientation of planks for through-wall flashing install.

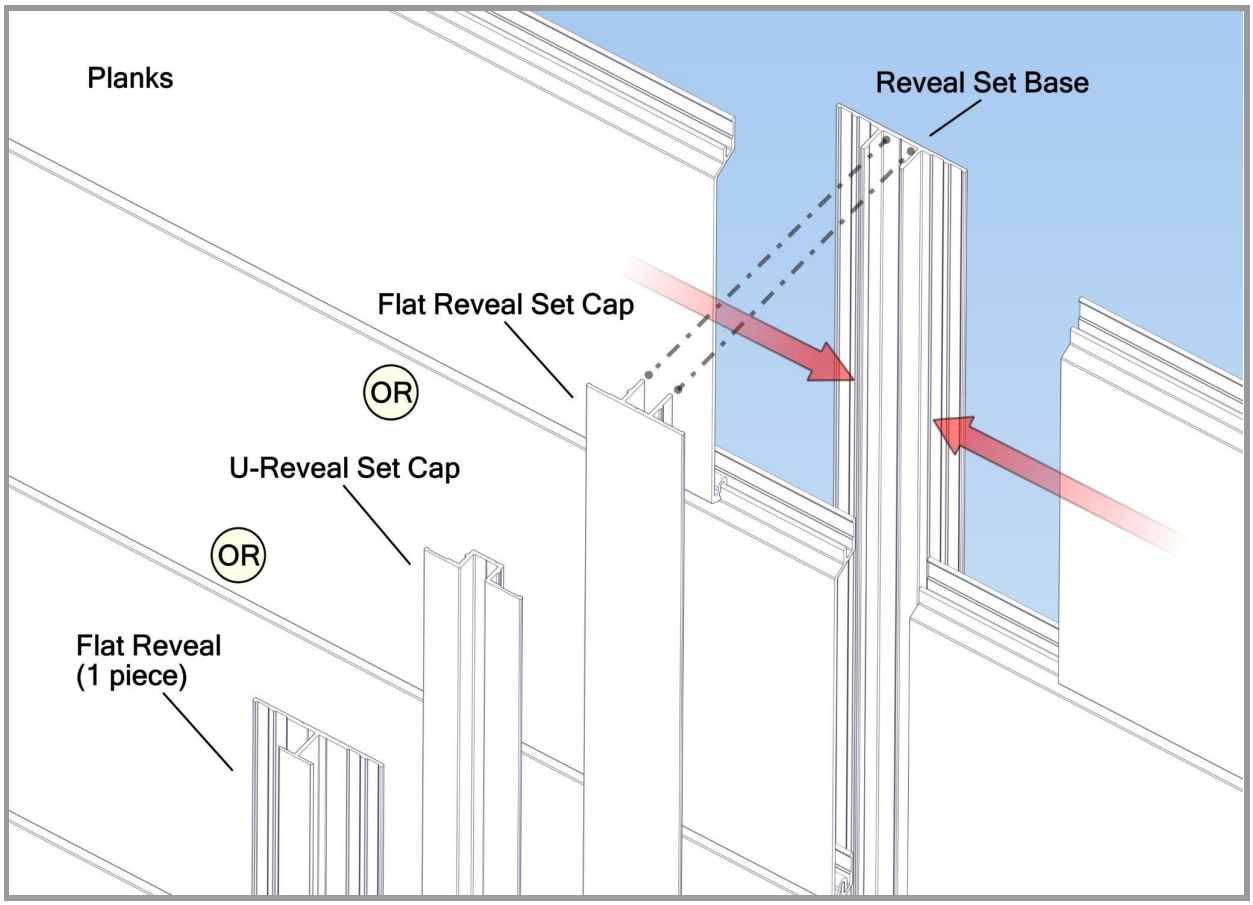
Through-wall Flashing



Horizontal Install

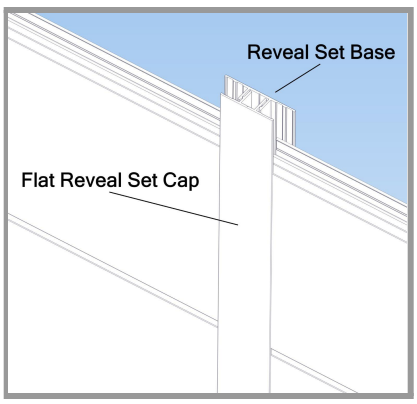
Vertical Install

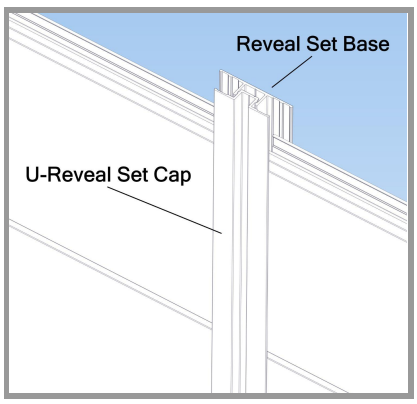
Install field components -Expansion reveal

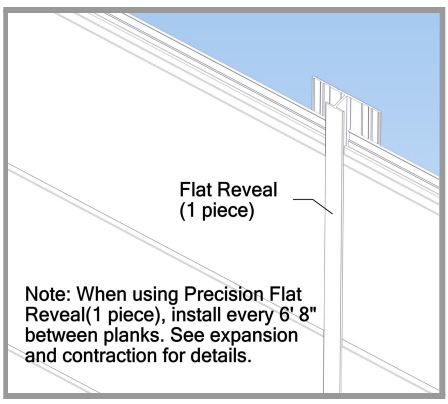


Expansion Reveal (Typical)

Type:	Traditional Flat Reveal Set/Traditional U-Reveal Set/Precision Flat Reveal**.**
Location:	Typically for wall areas greater than 24’ (7.3m) long (no butt-joints) or 40’(12.2m) long (with staggered butt-joints). See **Expansion and contraction** for details.
Details:	Install base only to start and end cap once planks are installed.



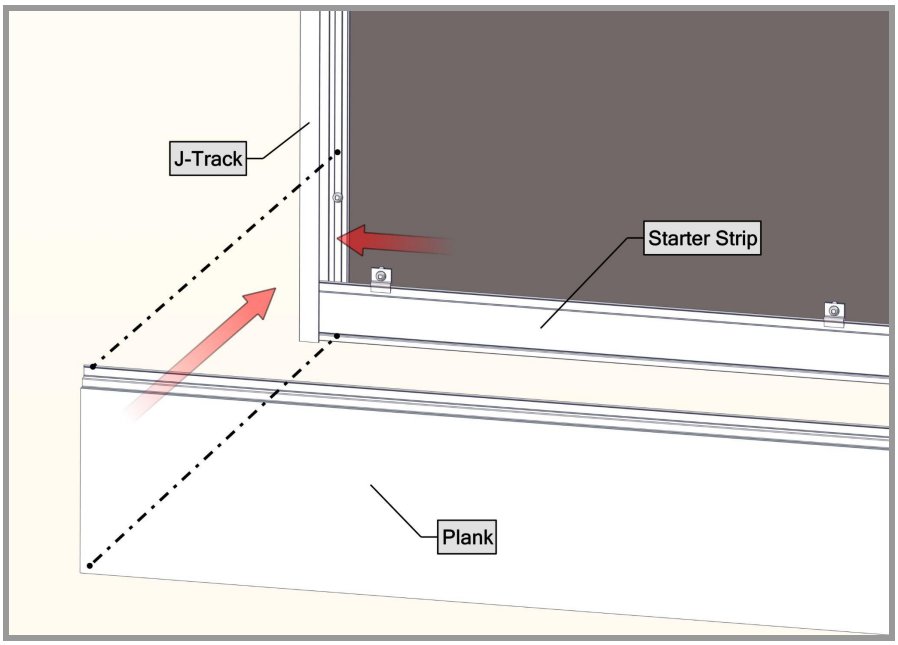




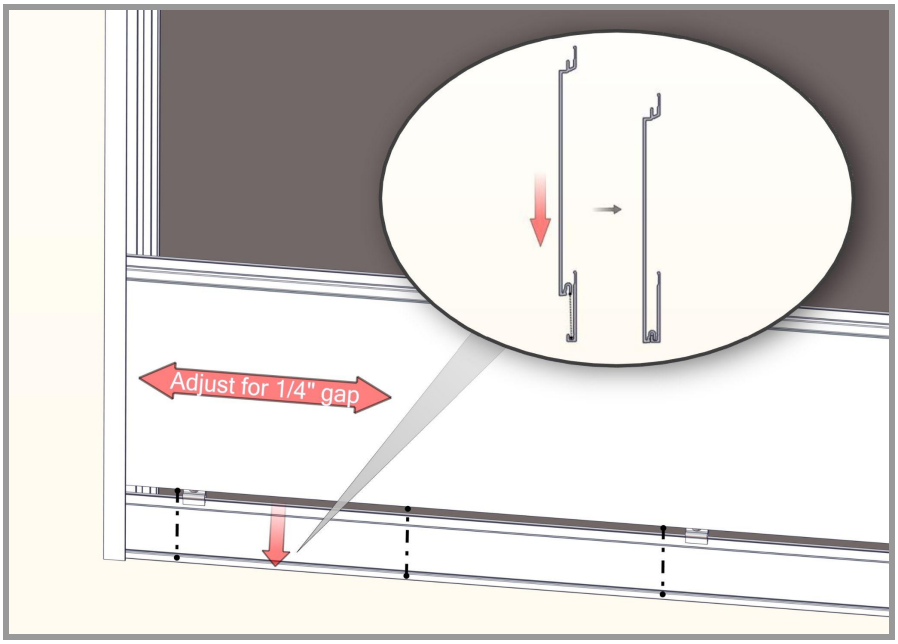
Install plank components

Horizontal

Step 1 -Placement of the plank into the trim.

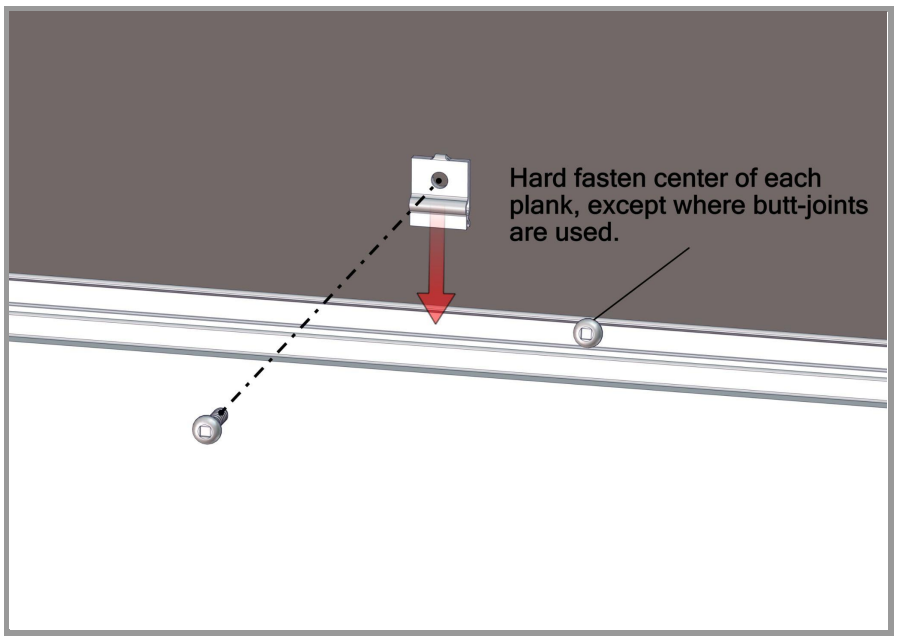


Step 2 -Secure the fit and adjust for the gap (expansion and contraction).

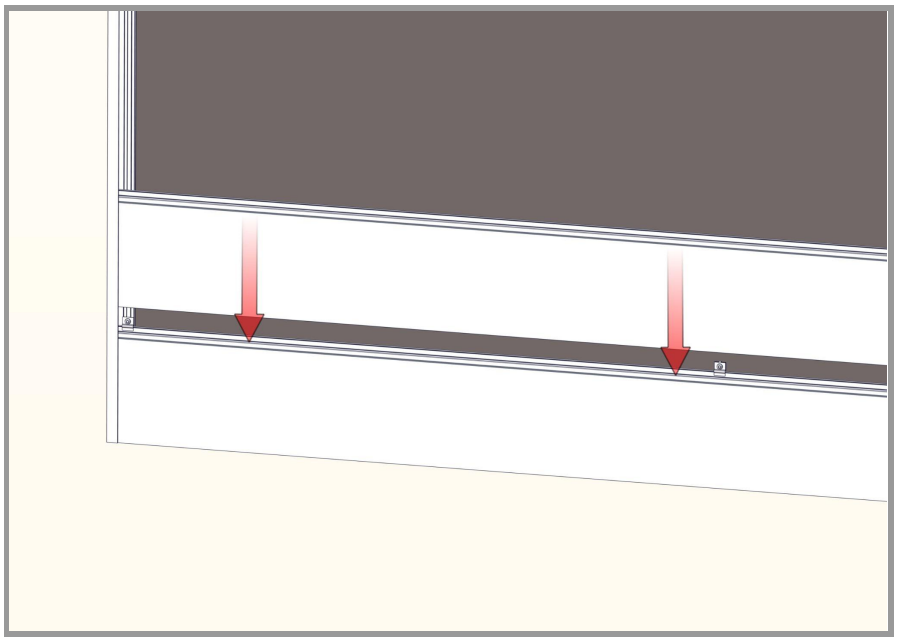


Planks	
Type:	V-groove, Channel, Smooth plank.
Location:	Starting the first row of planks, engaging with the tongue of the Starter or Starter J-Track.
Details:	Check for a level installation, shim Quick-Screen Clips where needed to correct any substrate inconsistencies. It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

Step 3 - Install Quick Screen Clips every 32”(813mm) O.C. spacing to secure the top of the planks. Hard fasten only one point at the center of each plank, except where butt-joints are used. See Install techniques for Hard fastening tips.



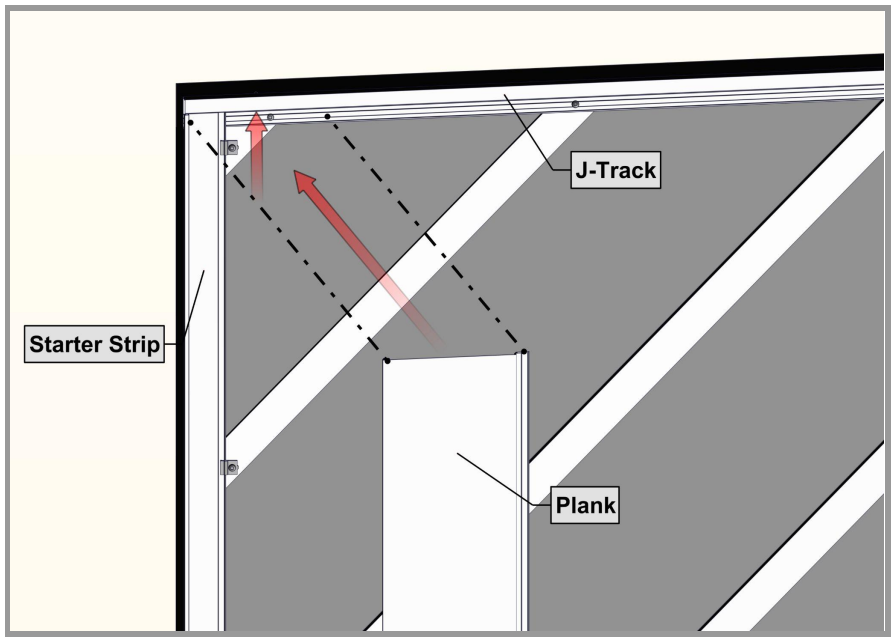
Step 4 - Install planks as needed. Review install techniques for further details and tips.



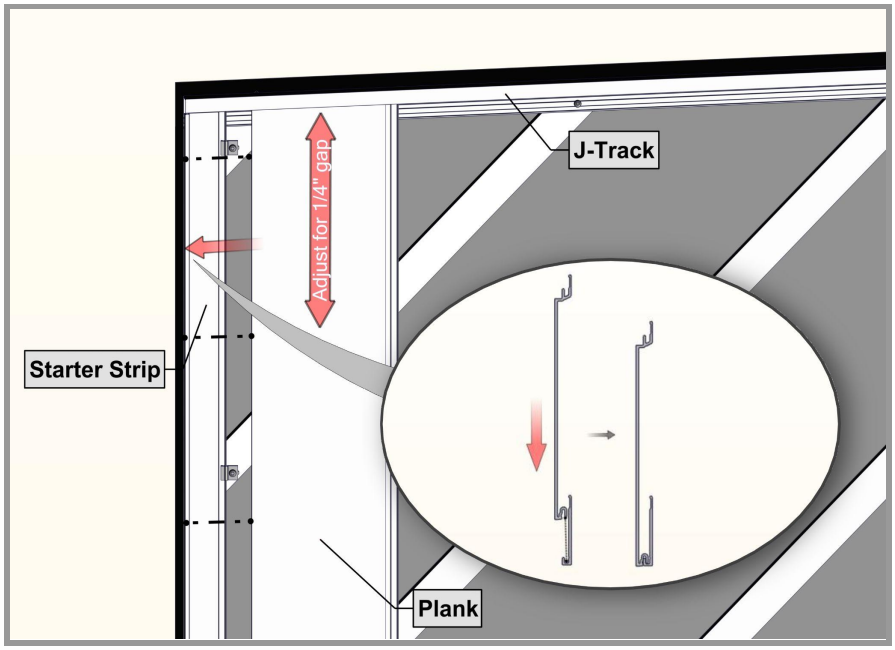
Install plank components

Vertical

Step 1 -Placement of the plank into the trim.



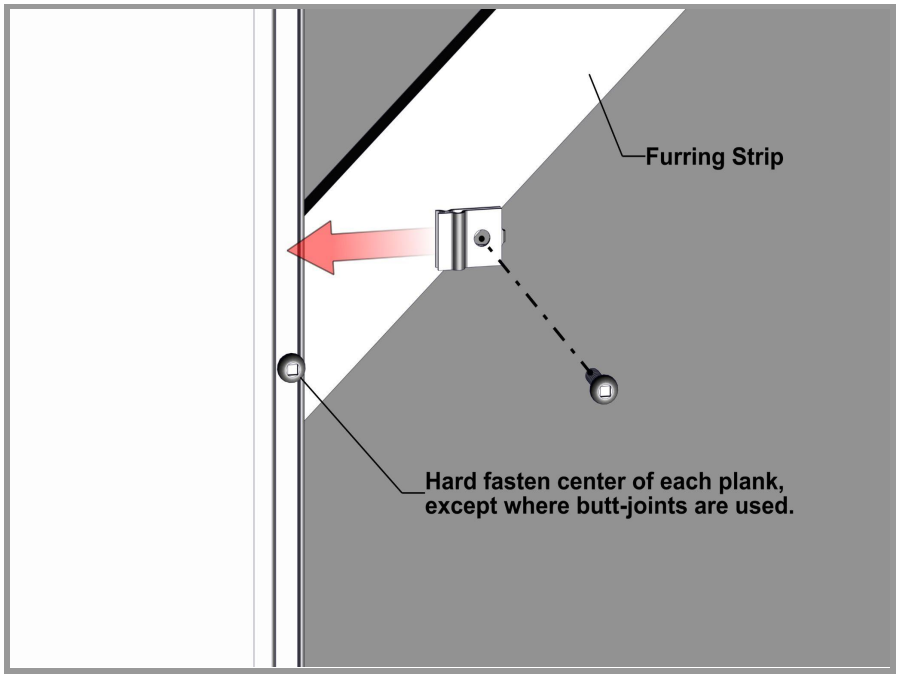
Step 2 -Secure the fit and adjust for the gap (expansion and contraction).



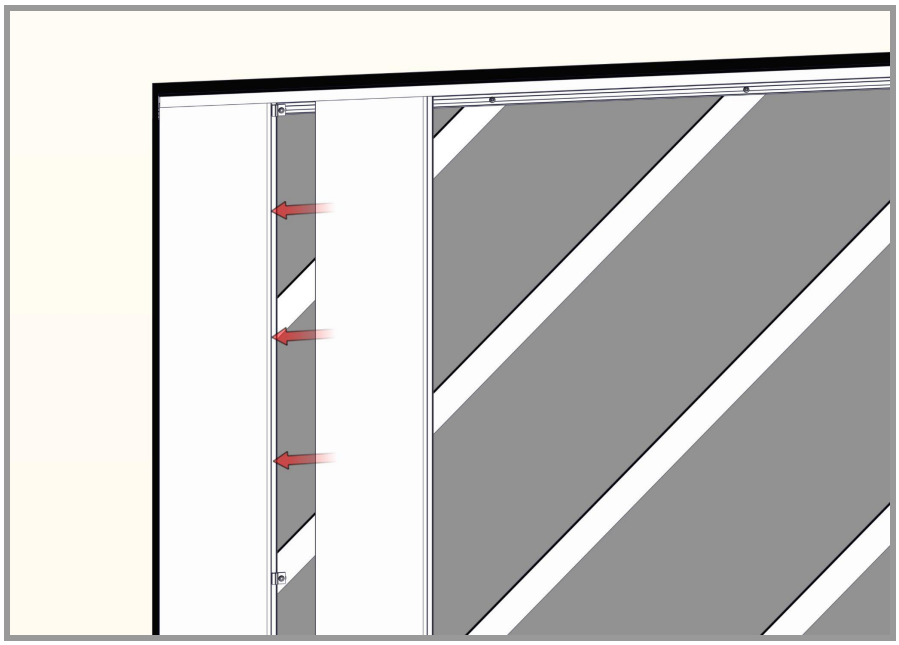
Planks

Type:	V-groove, Channel, Smooth plank.
Location:	Starting the first row of planks, engaging with the tongue of the Starter or Starter J-Track.
Details:	Check for a level installation, shim Quick-Screen Clips where needed to correct any substrate inconsistencies. It is good practice to check your installation every 2-3 rows for level/plumb and flat/straight, for best results.

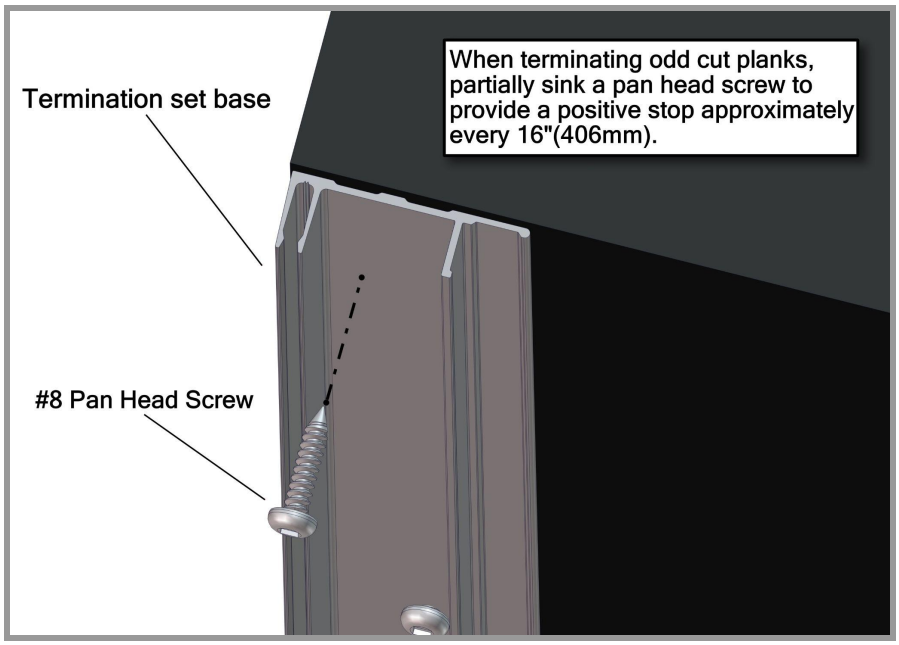
Step 3 -Install Quick Screen Clips every 32”(813mm) O.C. spacing to secure the top of the planks. Hard fasten only one point at the center of each plank, except where butt-joints are used. See Install techniques for hard fastening tips.



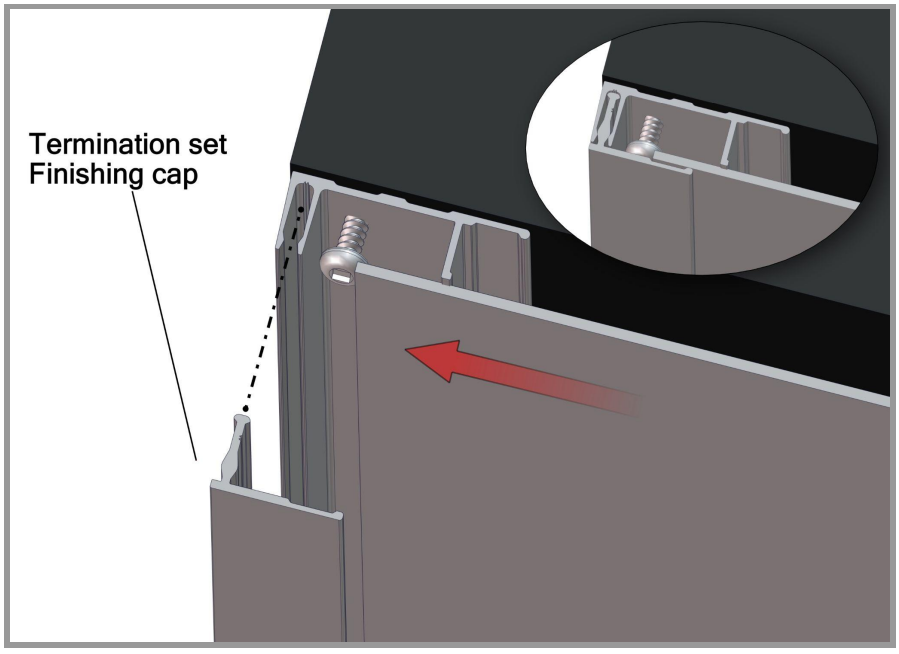
Step 4 -Install planks as needed. Review install techniques for further details and tips.



Step 5 - Finishing off edges and angled cuts.



Step 5.1 - Install edge plank with a 1/4” gap and screw to lock the plank into place.



Step 6 -Once planks are installed, finish off the perimeter trims with caps from two piece sets.

Component Caps	
Type:	Caps are the finishing piece of the 2 piece component sets.
Location:	Installed onto the base of the 2 piece set.
Details:	If required, use a rubber mallet or hammer and block to protect the finish during this process.

Appendix

Expansion and Contraction Tables

TABLE 1 - IMPERIAL

		AVERAGE TEMPERATURE AT TIME OF CUTTING & INSTALLATION										
	°C	-50	-40	-30	-20	-10	0	10	20	30	40	50
	°F	-58	-40	-22	-4	14	32	50	68	86	104	122
MIN/MAX POST CONSTRUCTION TEMP. °C	MIN/MAX POST CONSTRUCTION TEMP. °F	EXPANSION OR CONTRACTION (INCH/FOOT)										
-50	-58	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022	-0.024	-0.027
-40	-40	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022	-0.024
-30	-22	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019	-0.022
-20	-4	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016	-0.019
-10	14	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014	-0.016
0	32	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011	-0.014
10	50	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008	-0.011
20	68	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005	-0.008
30	86	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003	-0.005
40	104	0.024	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000	-0.003
50	122	0.027	0.024	0.022	0.019	0.016	0.014	0.011	0.008	0.005	0.003	0.000

TABLE 2 - METRIC

		AVERAGE TEMPERATURE AT TIME OF CUTTING & INSTALLATION										
	°C	-50	-40	-30	-20	-10	0	10	20	30	40	50
	°F	-58	-40	-22	-4	14	32	50	68	86	104	122
MIN/MAX POST CONSTRUCTION TEMP. °C	MIN/MAX POST CONSTRUCTION TEMP. °F	EXPANSION OR CONTRACTION (MM/METER)										
-50	-58	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380	-1.610	-1.840	-2.070	-2.300
-40	-40	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380	-1.610	-1.840	-2.070
-30	-22	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380	-1.610	-1.840
-20	-4	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380	-1.610
-10	14	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150	-1.380
0	32	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920	-1.150
10	50	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690	-0.920
20	68	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460	-0.690
30	86	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230	-0.460
40	104	2.070	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000	-0.230
50	122	2.300	2.070	1.840	1.610	1.380	1.150	0.920	0.690	0.460	0.230	0.000

TABLE 3

LONGBOARD® ARCHITECTURAL PRODUCTS

QUICK-SCREEN CLIP SPACING - WIND LOAD

4" PLANKS		PSF (Factored / Ultimate)										
		20	30	40	50	60	70	80	90	100	110	121
QUICK-SCREEN CLIP SPACING (IN) [1, 2, 3]	16" Wood	■	■	■	■	■	■	■	■	■	■	■
	16" 16ga	■	■	■	■	■	■	■	■	■	■	
	16" 18ga	■	■	■	■	■	■	■	■			
	16" 20ga	■	■	■	■	■	■	■				
	24" Wood	■	■	■	■	■	■	■	■	■		
	24" 16ga	■	■	■	■	■	■	■	■			
	24" 18ga	■	■	■	■	■	■					
	24" 20ga	■	■	■	■							
	32" Wood	■	■	■	■	■	■	■				
	32" 16ga	■	■	■	■	■	■					
	32" 18ga	■	■	■	■							
	32" 20ga	■	■	■								

Subtrate Types: Sheathed Wood-Frame Wall w/2.0 in. lg. #8 Pan-head wood screws
Sheathed 16ga, 50ksi Steel Stud Wall w/#8 Pan-Head Self-Drilling Screws
Sheathed 18ga, 33ksi Steel Stud Wall w/#8 Pan-Head Self-Drilling Screws
Sheathed 20ga, 33ksi Steel Stud Wall w/#8 Pan-Head Self-Drilling Screws

1_Spacing is from clip center to center

2_An unfactored dead load of 1.5 psf was assumed for the cladding

3_If fastening to every second stud, the attachment stud shal be staggered between adjacent runs of cladding

TABLE 4

LONGBOARD® ARCHITECTURAL PRODUCTS

QUICK-SCREEN CLIP SPACING - WIND LOAD

6" PLANKS		PSF (Factored / Ultimate)										
		20	30	40	50	60	70	80	90	100	110	121
QUICK-SCREEN CLIP SPACING (IN) [1, 2, 3]	16" Wood	■	■	■	■	■	■	■	■	■	■	■
	16" 16ga	■	■	■	■	■	■	■	■			
	16" 18ga	■	■	■	■	■	■					
	16" 20ga	■	■	■	■							
	24" Wood	■	■	■	■	■	■					
	24" 16ga	■	■	■	■	■						
	24" 18ga	■	■	■	■							
	24" 20ga	■	■	■								
	32" Wood	■	■	■	■							
	32" 16ga	■	■	■								
	32" 18ga	■	■									
	32" 20ga	■	■									

Subtrate Types: Sheathed Wood-Frame Wall w/2.0 in. lg. #8 Pan-head wood screws
Sheathed 16ga, 50ksi Steel Stud Wall w/#8 Pan-Head Self-Drilling Screws
Sheathed 18ga, 33ksi Steel Stud Wall w/#8 Pan-Head Self-Drilling Screws
Sheathed 20ga, 33ksi Steel Stud Wall w/#8 Pan-Head Self-Drilling Screws

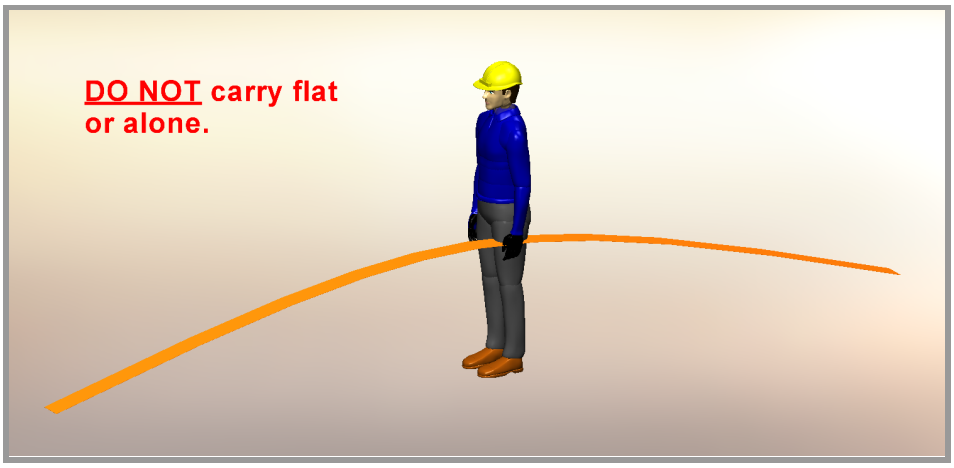
1_Spacing is from clip center to center

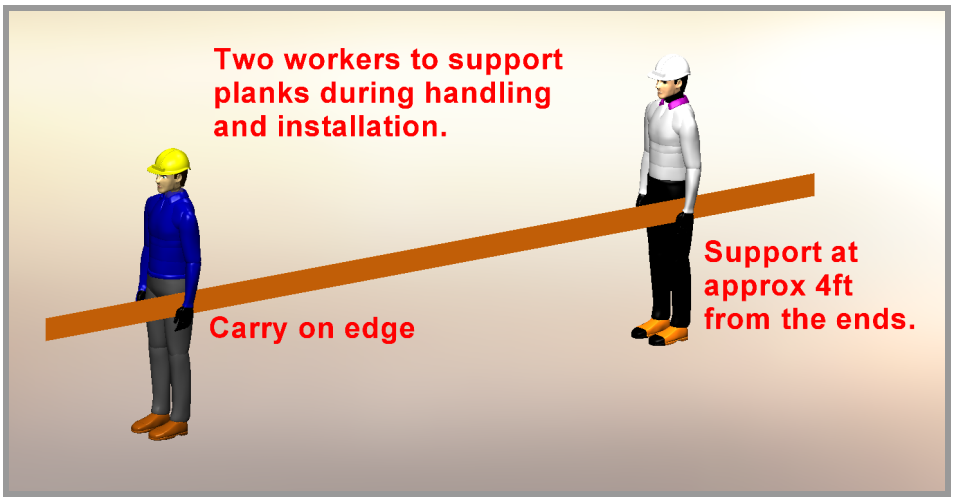
2_An unfactored dead load of 1.5 psf was assumed for the cladding

3_If fastening to every second stud, the attachment stud shal be staggered between adjacent runs of cladding

Proper Handling of Longboard Products

To help avoid injury and product damage, Longboard products require proper handling to and from storage areas during installation. When carrying or installing any products it is recommended that they be moved or carried by at least two people with each support point approximately 4ft from the ends. **Carrying products without proper support can cause excessive bending which may damage the appearance or finish of the product.** Any short cut lengths should also be carried on edge while supporting the material. See below for details.





⚠️Delivery, Storage & Handling⚠️

- Always inspect the delivery for damage and contact LB ASAP if there are any issues: info@longboardproducts.com or 1-800-604-0343 and include your PO# and any pictures if possible. Longboard is not responsible for the installation of blemished or damaged material.
- Be sure to store the material flat, keep it dry, safe & secure and remain in unopened cartons until ready to be installed.
- Always wear appropriate PPE when handling products.

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For more information, contact client care at info@longboardproducts.com or call toll free 1-800-604-0343.